| ICAICT814A | Develop cloud computing strategies for a business | |
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| Modification History   |  |  | | --- | --- | | Release | Comments | | Release 1 | This version first released with ICA11 Information and Communications Technology Version 2. | | | |
| Unit descriptor | This unit describes the performance outcomes, skills and knowledge required to develop a cloud computing strategy for a business. | |
| Application of the unit | This unit applies to senior management, including strategic business analysts and chief information officers who set up a strategy to establish cloud computing services as a key business enabler. | |
| Licensing/Regulatory Information | No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority. | |
| Prerequisite units |  |  |
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| Employability skills | This unit contains employability skills. | |
| Unit sector | General ICT | |

| ELEMENTS | PERFORMANCE CRITERIA |
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| Elements describe the essential outcomes of a unit of competency. | Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide. |
| 1. Analyse existing business and information and communications technology (ICT) system assets | * 1. Review business assets and identify the most appropriate for possible cloud deployment   2. Evaluate each asset’s risk tolerance to the business for possible cloud deployment |
| 1. Select the most suitable deployment and/or delivery model for each asset | * 1. Map each asset to potential cloud deployment models   2. Review and select most relevant delivery model for each asset   3. Document security risks to the business of using the identified deployment and delivery models |
| 1. Develop a cloud implementation strategy | * 1. Develop a cloud implementation plan incorporating the most appropriate deployment and delivery models in line with enterprise requirements   2. Develop costings for the technology requirements of the implementation proposal   3. Develop processes for the periodic review of the cloud service metrics associated with implementation proposal |

| REQUIRED SKILLS AND KNOWLEDGE |
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| This section describes the skills and knowledge required for this unit. |
| Required skills |
| * analytical and research skills to determine and document current business processes and cloud service sources * coaching, mentoring and teamwork skills to ensure support of cloud computing strategies as an ongoing initiative * communication, negotiation and personal networking skills to influence the adoption of cloud computing strategies * initiative and enterprise skills to proactively seek out cloud computing opportunities * literacy and numeracy skills to review and present statistical data and business cases * problem-solving and decision-making skills to deal with issues in an acceptable timeframe * project, planning and organisational change-management skills to ensure the success of cloud computing implementation projects * technical skills to apply information technology solutions in support of cloud computing initiatives |
| Required knowledge |
| * cloud computing concepts, processes and trends * relevant enterprise policies and legislation that affect business operations, specifically privacy legislation * legal, ethical and security issues relating to cloud computing * organisational change-management theory and methods |

| RANGE STATEMENT | |
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| The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included. | |
| Assets may include: | * applications * data * functions * processes. |
| Risk tolerance may include: | * compliance and audit with both internal and external policies * disaster recovery and traditional security requirements * governance and enterprise risk management incorporating such aspects as agreement breaches and data protection * physical country location * responsibility for data confidentiality, integrity and availability * service level agreements to protect sensitive data. |
| Deployment models may include: | * community cloud * hybrid cloud * private cloud * public cloud. |
| Delivery model may include: | * infrastructure as a service (IaaS) * platform as a service (PaaS) * software as a service (SaaS). |
| Security risks may include: | * anti-virus measures * application security * encryption implementation * ICT systems security * network firewalls * physical access control * physical location of cloud servers, plant security. |
| Cloud service metrics may include: | * measures of access speed * measures of quality, e.g. feedback rating on usefulness * measures of usage. |
| EVIDENCE GUIDE | |
| The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package. | |
| Overview of assessment |  |
| Critical aspects for assessment and evidence required to demonstrate competency in this unit | Evidence of the ability to:   * analyse and document the effectiveness of existing cloud computing deployment and delivery models * research cloud computing options in the marketplace * develop a cloud computing implementation strategy that meets enterprise needs. |
| Context of and specific resources for assessment | Assessment must ensure access to:   * workplace of sufficient complexity to enable the required level of analysis to be carried out in relation to current business processes and possible future cloud computing solutions * relevant enterprise strategic documentation, including: * strategic planning documents * financial, ICT infrastructure and relevant enterprise objectives and policies.   Where applicable, physical resources should include equipment modified for people with special needs. |
| Method of assessment | A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:   * direct observation of the candidate carrying out the required work * verbal or written questioning to assess required knowledge and skills * review of cloud implementation strategy prepared by the candidate * review of a portfolio of the work undertaken.   Note: The preferred assessment method is through a workplace project or through a simulated medium to large enterprise workplace. |
| Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.  Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.  Indigenous people and other people from a non-English speaking background may need additional support.  In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge. |